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09/512,968	02/24/2000	David R. Hembree	MI22-869	5950

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SPOKANE, WA 99201-3828

EXAMINER

NGUYEN, VINH P

ART UNIT	PAPER NUMBER
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2829

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/512,968

Applicant(s)

HEMBREE, DAVID R.

Examiner

VINH P NGUYEN

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 64-111 is/are pending in the application.
- 4a) Of the above claim(s) 66,76,93-96,99 and 100 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 81-90,97 and 98 is/are allowed.
- 6) ☒ Claim(s) 64,65,67-75,77-80,91,92,101-107 and 109-111 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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1. Claims 64-65,67-75,77-80,91-92,101-107,109-111 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 64,79,91,108, it appears that the scope of the claim is incomplete because the wafer holder can not be used for processing the wafer. It is intended to provide electrical signals communication among the wafer (20), the intermediate member (20), the chuck (40) and the data gathering device (14). It is impossible for this apparatus to process/make the wafer.

In claim 75, "the electrical interconnect" has not been recited previously, therefore this term is indefinite.

In claims 101 and 111, it is unclear how the electrical coupling is interrelated and associated with the sensor.

As to claims 103-104 and 106, it appears that the wafer holder is not able to form a plurality of discrete integrated circuits of a plurality of respective dies to be singulated from the wafer at a subsequent moment in time. Therefore this claim is improperly claimed.

In claim 105, it is unclear what "a processing area of the wafer processing apparatus" represents. Is it shown in any of drawings?

The dependent claims not specifically address share the same indefiniteness as they depend from rejected base claims.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 64-65,67-71,73,75,77-80,107-108 are rejected under 35 U.S.C. 102(e) as being anticipated by Berger et al (Pat # 6,020,750).

As to claims 64,69,71,77,79 and 108, Berger et al disclose a wafer test and burn-in platform as shown in figure 2 having a wafer holder (16,26,28) having circuitry (26,28) configured to communicate a process signal from a received wafer (12) having electrical couplings (electrical contact regions on the wafer) .

As to claim 65, since the device of Berger et al is used for testing and burn-in, it would have been well known that this device would inherently include a test equipment connected to the wafer holder (10) for receiving and analyzing the test signals from the holder (10).

As to claim 67, it appears that the wafer holder (16,26,28) has circuitry (26,28) including

first and second surfaces. It appears that the device of Berger et al inherently has an electrical interconnect for electrically coupling the surface features (26) on the first surface to the second surface features (28) on the second surface so that the test signals would be able to flow from the wafer (12) to the test equipment through the holder (10).

As to claims 68 and 70, it appears that the wafer holder of Berger et al is configured to face a received wafer (12) on the first surface and the second surface is configured to face a wafer chuck (14).

As to claim 73, it appears that the wafer holder (16,26,28) is considered as an intermediate member adapted to couple with a chuck (14).

As to claim 75, it appears that the interconnect (16,26,28) has conductive columns (26,28) extend outward from plural surfaces of the wafer holder.

As to claims 78 and 80, it appears that the wafer holder is adapted to expose the wafer to a processing environment to process the wafer (testing environment). It is noted that the word "process" is defined as a series of actions, changes, or functions bringing about a result, testing environment would be qualified for this definition. However the term "process" is not necessary related to a method of making.

As to claims 107, it is well known that the wafer (12) of Berger et al comprising a plurality of dies prior to singulation of at least one of the dies at a subsequent moment in time.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 72,74,91-92 rejected under 35 U.S.C. 103(a) as being unpatentable over Berger et al (Pat # 6,020,750).

Berger et al do not mention about the vacuum chuck in figure 2. However, Berger et al teach that it would have been well known in the art to use vacuum chuck for holding the wafer under test (see column 7. lines 39-50). As to claims 72,74, it would have been old and well known for one of ordinary skill in the art to use a vacuum chuck in figure 2 as taught by Berger et al so that the wafer is held tightly without using any mechanical holder so that damage of the wafer could be avoided.

As to claim 92, it appears that the workpiece holder is adapted to expose the electronic device workpiece to a processing environment to process the wafer (testing environment). It is noted that the word "process" is defined as a series of actions, changes, or functions bringing about a result, testing environment would be qualified for this definition. However the term "process" is not necessary related to a method of making.

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6. Claims 81-90 and 97-98 are allowable since the prior art does not disclose an electronic device workpiece processing apparatus having an electronic workpiece including a sensor and an electrical coupling configured to provide electrical connection of the sensor with the electrical coupling of the second surface of the intermediate member.

7. Applicant's arguments filed on 03/13/03 have been fully considered but they are not persuasive.

Applicants argued that claims 93-96 and 99-100 are generic to species of figure 3. Examiner disagrees with Applicants about this issue because the combined limitations of these instant claims read specifically on figures 9 and 10 because contact plate (90) is shown only in these figures but not in elected figure 3. Furthermore, since generic claim 64 has not been allowed, claims 66 and 76 drawn to different species, has been withdrawn from consideration. Therefore, it would be proper to withdrawn these claims 66,76,93-96 and 99-100 from consideration. However, claims 83 and 87 are now allowed since the generic claim 81 is allowable.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VINH P. NGUYEN whose telephone number is (703) 305-4914.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4900.

  
VINH P. NGUYEN  
PRIMARY EXAMINER

A.U. 2829

06/13/03